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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,933	09/30/2003	Kevin I. Bertness	C382.12-0141	2370

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EXAMINER	
TSAI, CAROL S W	

ART UNIT	PAPER NUMBER
2857	

DATE MAILED: 07/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/675,933	BERTNESS ET AL.	
	Examiner	Art Unit	
	Carol S Tsai	2857	

-- The MAILING DATE of this communicati n appears on th cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 September 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-55* is/are pending in the application.

4a) Of the above claim(s) *1-27* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *28-55* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-55* are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *2/25,3/31,5/27/04*.
4) ☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. This application contains claims directed to the following patentably distinct species of the claimed invention:

I. The species best illustrated by Figs. 1 and 2.
II. The species best illustrated by Fig. 3.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim is deemed generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the

prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

2. During a telephone conversation with Judson K. Champlin on June 28, 2004 a provisional election was made without traverse to prosecute the invention of Species II, claims 28-55.

3. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-27 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Information Disclosure Statement

4. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Specification

5. The disclosure is objected to because of the following informalities:

At page 13, line 4, "he battery" should read - - the battery - -.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 28-31, 35-38, and 46-55 are rejected under 35 U.S.C. 102(b) as being anticipated by U. S. Patent No. 6,424,158 to Klang.

With respect to claims 28-30, and 35-37, Klang discloses a method of testing a storage battery, comprising: querying an operator with a query regarding a physical characteristic of the battery and receiving a query response battery (see Abstract, lines 4-9; col. 3, lines 18-19; and col. 5, lines 26-39); determining battery type based upon at least one query response and testing the battery based upon a measurement of a parameter of the battery and the at least one query response (see col. 8, line 46 to col. 9, line 64).

As to claims 31 and 38, Klang also discloses the response relating to observations about the battery (see col. 14, line 64 to col. 15, line 8).

As to claims 46 and 47, Klang also discloses the battery type comprising sealed lead acid (see col. 5, line 2-8).

As to claims 48-55, Klang does not disclose expressly the battery type comprising deep cycle/an electrolyte gelatin/an absorbed glass matt/starting, light, ignition battery/sealed flooded/antimony/hybrid.

It is, however, considered inherent that Klang's battery type comprising deep cycle/an electrolyte gelatin/an absorbed glass matt/starting, light, ignition battery/sealed flooded/antimony/hybrid (see col. 2-9), because such types are known to be one type of batteries to be tested in order that diagnostic tests on batteries can be carried out.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klang in view of U. S. Patent No. 6,316,914 to Bertness.

As noted above, Klang discloses the claimed invention, except for a dynamic parameter.

Bertness teaches a dynamic parameter (see paragraph 0010).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Klang's method to include a dynamic parameter, as taught by Bertness, in order that a parameter which is a function of a signal with a time varying component of battery can be measured.

As to claims 33 and 34, Klang does not disclose coupling to the battery with Kelvin connection.

Bertness teaches coupling to the battery with Kelvin connection (see Fig. 3).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Klang's method to include coupling to the battery with Kelvin connection, as taught by Bertness, in order to allow current I to be injected into battery through a first pair of terminals while the voltage V across the terminals is measured by a second pair of connections.

10. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klang in view of U. S. Patent No. 4,360,780 to Skutch, Jr.

As noted above, Klang discloses the claimed invention, except for a shape of the battery.

Skutch, Jr. discloses a shape of the battery (see Figs. 1 and 2).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Klang's method to include a shape of the battery, as taught by Skutch, Jr., in order to indicate to the user how a 9 volt battery with a rectangular shape or a 1.5 volt battery with a cylindrical shape is to be placed in the tester.

11. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klang in view of U. S. Patent No. 4,723,656 to Kiernan et al.

As noted above, Klang discloses the claimed invention, except for a color of the battery.

Kiernan et al. teach a color of the battery (see col. 3, lines 1-11).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Klang's method to include a color of the battery, as taught by Kiernan et al., in order to determine the battery being operating normally or defectively based on the color indicated.

12. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klang in view of U. S. Patent No. 5,432,025 to Cox.

As noted above, Klang discloses the claimed invention, except for caps on the battery.

Cox teaches caps of the battery (see Abstract, lines 1-5).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Klang's method to include caps of the battery, as taught by Cox, in order that a battery connection can be restored to enable the flow of current to start the engine of an automatible.

13. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klang in view of U. S. Patent No. 6,008,652 to Theofanopoulos et al.

As noted above, Klang discloses the claimed invention, except for a tub connected to the battery.

Theofanopoulos et al. teach a tub connected to the battery (see Abstract, lines 1-7).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Klang's method to include a tub connected to the battery, as taught by Theofanopoulos et al., in order to determine the battery voltages of each battery after it is mounted and connected within the tub to determine if the batteries have the desirable voltage and will operate as they are intended and are connected properly.

14. Claims 43 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klang in view of U. S. Patent No. 4,874,679 to Miyagawa.

As noted above, with respect to claims 43 and 44, Walter et al. disclose the claimed invention, except for a visible liquid level of the battery.

Miyagawa teach a visible liquid level of the battery (see Abstract, lines 1-8).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Klang's method to include a visible liquid level of the battery, as taught by Miyagawa, in order to promote viewing of each height of the liquid in each element of the storage battery.

15. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klang in view of U. S. Patent No. 5,707,015 to Guthrie.

As noted above, Klang discloses the claimed invention, except for the brand label on the battery.

Guthrie teaches the brand label on the battery (see col. 8, lines 35-36).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Klang's method to include the brand label on the battery,

as taught by Guthrie, because the brand indication can be selected as the representative specific areas for further reducing the time required for the inspection.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Raichle et al. disclose a method and apparatus that allows a battery charger/tester to transmit and receive information from a remote location.

Kechmire discloses method of testing a lead battery for the purpose of charging it under optimal conditions, characterized in that it consists in testing the lead battery for the purpose of obtaining information relating to its condition by applying a test current and/or pulse thereto and by increasing the voltage at the battery terminals.

Bertness discloses a device for testing a battery of the type which consists of a string of individual cells includes circuitry adapted to measure a dynamic parameter of the cells or groups of cells that make up the battery.

Wiley et al. disclose an on-line battery management and monitoring system and method for monitoring a plurality of battery cells identifies and computes individual cell and battery bank operating parameters.

Jacobs et al. disclose a system and method for testing a battery having an internal impedance by generating digital battery parameter values corresponding to the battery parameters at different points in time by means of current, voltage and temperature measurement circuits and an analog-to-digital converter.

Ottone discloses a battery analyzer for testing industrial batteries under a constant

current load.

Frailing et al. disclose apparatus for detecting the presence of a defective cell in a lead-acid storage battery.

Contact Information

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carol S. W. Tsai whose telephone number is (571) 272-2224. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (571) 272-2216. The fax number for TC 2800 is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2800 receptionist whose telephone number is (571) 272-1585 or (571) 272-2800.

In order to reduce pendency and avoid potential delays, Group 2800 is encouraging FAXing of responses to Office actions directly into the Group at (703) 872-9306. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers which require a fee by applicants who authorize charges to a PTO deposit account. Please identify the examiner and art unit at the top of your cover sheet. Papers submitted via FAX into Group 2800 will be promptly forwarded to the examiner.

Carol S. W. Tsai
Patent Examiner
Art Unit 2857

07/01/04